

The years of highest and lowest mean temperatures for August are shown in Table I of the REVIEW for August, 1894. The mean temperature for the current month was the highest on record at: Port Angeles, 60.1; Carson City, 69.7; Baker City, 70.0; Roseburg, 70.4; Portland, Oreg., 71.1; Spokane, 72.2; Walla Walla, 76.8. It was the lowest on record at: Sioux City, 68.2.

The maximum and minimum temperatures of the current month are given in Table I. The highest maxima were: Yuma, 112; Phoenix, 110; Red Bluff, 109; Fresno, 108; Topeka and Shreveport, 105; Walla Walla and Palestine, 104; Sacramento and Fort Smith, 103. The lowest maxima were: Block Island and Nantucket, 77; Point Reyes Light, 71; San Francisco and Eureka, 70; Tatoosh Island, 68. The highest minima were: Phoenix and Corpus Christi, 73; Galveston, New Orleans, Key West, Jupiter, and Charleston, 71; Pensacola and Tampa, 70; Yuma and Mobile, 69. The lowest minima were: Winnemucca, 36; Carson City, 37; Havre, 38; Moorhead, 39; Williston, Huron, Marquette, and Northfield, 30.

The years of highest maximum and lowest minimum temperatures for August are given in the last four columns of Table I of the REVIEW for August, 1896. During the current month the maxima temperatures were equal to or above the highest on record at: Carson City, 95; Atlanta, 96; Pensacola, 97; New Orleans, 99; Mobile, 101; Palestine, 104. The minimum temperatures were not below previous records at any Weather Bureau station.

The greatest daily range of temperature and the data for computing the extreme and mean monthly ranges are given for each of the regular Weather Bureau stations in Table I. The largest values of the greatest daily ranges were: Winnemucca and Idaho Falls, 47; Sacramento, Carson City, and Pierre, 44. The smallest values were: Hatteras, 11; Corpus Christi, 14; Block Island, 15; Galveston, Jupiter, and Nantucket, 17.

Among the extreme monthly ranges the largest were: Winnemucca, 62; Havre, 59; Carson City, 58; Williston, 57. The smallest were: Corpus Christi, Hatteras, and Nantucket, 18; Key West and Block Island, 20; San Francisco, 21; Tatoosh Island, 22.

Accumulated monthly departures from normal temperatures from January 1 to the end of the current month are given in the second column of the following table, and the average departures are given in the third column, for comparison with the departures of current conditions of vegetation from the normal condition.

Districts.	Accumulated departures.		Districts.	Accumulated departures.	
	Total.	Average.		Total.	Average.
New England .....	+ 3.8	+ 0.5	Florida Peninsula .....	0.0	0.0
Middle Atlantic .....	+ 0.9	+ 0.1	Southern Slope .....	0.0	0.0
South Atlantic .....	+ 1.3	+ 0.2			
East Gulf .....	+ 1.8	+ 0.2			
West Gulf .....	+ 6.9	+ 0.9	Ohio Valley and Tenn. ....	- 0.9	- 0.1
Lower Lake .....	+ 2.5	+ 0.3	North Dakota .....	- 5.8	- 0.7
Upper Lake .....	+ 8.9	+ 1.1	Northern Slope .....	- 2.1	- 0.3
Upper Mississippi Valley ..	+ 1.7	+ 0.2	Southern Plateau .....	- 6.4	- 0.8
Missouri Valley .....	+ 0.8	+ 0.1	Middle Plateau .....	- 5.8	- 0.7
Middle Slope .....	+ 3.0	+ 0.4	Middle Pacific .....	- 2.0	- 0.2
Northern Plateau .....	+ 8.2	+ 1.0	South Pacific .....	- 4.3	- 0.5
North Pacific .....	+ 1.2	+ 0.2			

#### MOISTURE.

The quantity of moisture in the atmosphere at any time may be expressed by the weight of the vapor coexisting with the air contained in a cubic foot of space, or by the tension or pressure of the vapor, or by the temperature of the dew-point. The mean dew-point for each station of the Weather Bureau, as deduced from observations made at 8 a. m. and 8 p. m., daily, is given in Table I.

The rate of evaporation from a special surface of water on muslin at any moment determines the temperature of the wet-bulb thermometer. The mean wet-bulb temperature is now published in Table I; it is always intermediate, and generally about half way between the temperature of the air and of the dew-point. The quantity of water evaporated in a unit of time from the muslin surface may be considered as depending essentially upon the wet-bulb temperature, the dew-point, and the wind.

The relative humidity, or the ratio between the moisture that is present in the air and the moisture that it would contain if saturated at its observed temperature is given in Table I as deduced from the 8 a. m. and 8 p. m. observations. The general average for a whole day, or any other interval, would properly be obtained from the data given by an evaporimeter, but may also be obtained, approximately, from frequent observations of the relative humidity.

#### PRECIPITATION.

[In inches and hundredths.]

The distribution of precipitation for the current month, as determined by reports from about 2,500 stations, is exhibited on Chart III. The numerical details are given in Tables I, II, and III. The total precipitation for the current month was largest, exceeding 10 inches, in southern Mississippi, Alabama, and northwestern Florida. In general it was less than 4 inches; little or none fell at Rocky Mountain, Oregon, and California stations; regions of from 3 to 5 inches occurred in eastern Arizona and western Texas. The larger values for regular stations were: Mobile, 11.56; Tampa, 7.84; Charleston, 7.34; Narragansett Pier, 6.05; Jupiter, 6.85. In Canada, Bermuda, 7.40.

Details as to excessive precipitation are given in Tables XI and XII.

The diurnal variation, as shown by tables of hourly means of the total precipitation, deduced from the self-registering gauges kept at the regular stations of the Weather Bureau, is not now tabulated.

The current departures from the normal precipitation are given in Table I, which shows that precipitation was in excess in portions of Alabama, Georgia, South Carolina, eastern Tennessee, and southern Florida, but elsewhere generally deficient. The large excesses were: August, 5.2; Mobile, 4.7; Montgomery, 2.4; Fort Smith, 2.2. The large deficits were: Raleigh, 6.0; Kittyhawk, 5.5; Cape Henry and Wilmington, 4.0.

The average departure for each district is given in Table I. By dividing each current precipitation by its respective normal the following corresponding percentages are obtained (precipitation is in excess when the percentage of the normal exceeds 100):

Above the normal: Florida Peninsula, 111; East Gulf, 103; southern Plateau, 107; Northern Plateau, 131.

Normal: northern Slope, middle Pacific, and southern Pacific.

Below the normal: New England, 98; middle Atlantic, 63; south Atlantic, 77; west Gulf, 83; Ohio Valley and Tennessee, 64; lower Lake, 86; upper Lake, 83; North Dakota, 66; upper Mississippi, 57; Missouri Valley, 70; middle Slope, 92; southern Slope, 79; middle Plateau, 71; north Pacific, 90.

In Canada, Prof. R. F. Stupart says:

The rainfall was nearly average over the greater portion of the Dominion. The only districts in which there was any marked departure above were those lying north and west of Lake Superior and near the Georgian Bay, and the only marked deficiency occurred in the upper St. Lawrence Valley, where the amount was just about half the average.

The years of greatest and least precipitation for August are